SOTER SMARTER PREVENTION | COVIA

Case Study

Covia Eliminates Reportable Ergonomic Injuries with Soter

Covia, a leading provider of mineral-based and material solutions for industrial and energy markets, operates in heavy industrial environments common to the mining sector. With a workforce often characterized by long tenure, the company faced persistent challenges related to musculoskeletal injuries (MSIs), particularly affecting the shoulders and back. Recognizing the need for a proactive and data-driven approach to ergonomics, Covia sought innovative solutions to protect its employees and enhance its safety culture.

The Challenge Addressing Persistent Shoulder and Back Injuries

Before implementing Soter technology, Covia identified significant issues with musculoskeletal health. As Mona Legin, Ergonomics Specialist at Covia, described, "*We had a fair bit of reportables and lost time injuries for shoulder and back. They were consistently the top affected body parts, and they were mostly related to the strains and sprains.*" Operating in heavy industrial environments often meant dealing with the accumulation of small little aches and pains common among workers with longer tenure. Key challenges included this high incidence of injuries, the subjectivity inherent in traditional ergonomic assessments, the delay in corrective feedback which limited immediate learning opportunities, and the difficulty in objectively quantifying the effectiveness of interventions.

The Search for an Objective Solution

Covia explored various technologies on the market, seeking an objective and effective way to evaluate and reduce ergonomic risks. SoterCoach by Soter stood out significantly from other options during this evaluation process. The platform was chosen for several compelling reasons that directly addressed Covia's needs:

- **Simplicity and Ease of Use**: The system was straightforward and user-friendly for workers across different generations and levels of technological familiarity.
- **Unique Live Feedback**: Soter was the only provider offering immediate, real-time haptic feedback, enabling workers to instantly recognize and correct risky postures during their tasks, a crucial factor for Covia.
- **Scalability**: The technology could be effectively deployed across multiple Covia sites.
- **Integrated Video Assessment**: The platform combined wearable sensor data with a simple video analysis tool, providing a comprehensive ergonomic assessment solution.

Implementation: A Phased and People-Centric Approach

Understanding the sensitivity around introducing wearable technology, Covia adopted a deliberate, phased rollout strategy, described by Mona Legin as "*slow but steady*" because they "*did not want a rushed process*." This people-centric approach focused on building trust and familiarity over time. Key phases included:

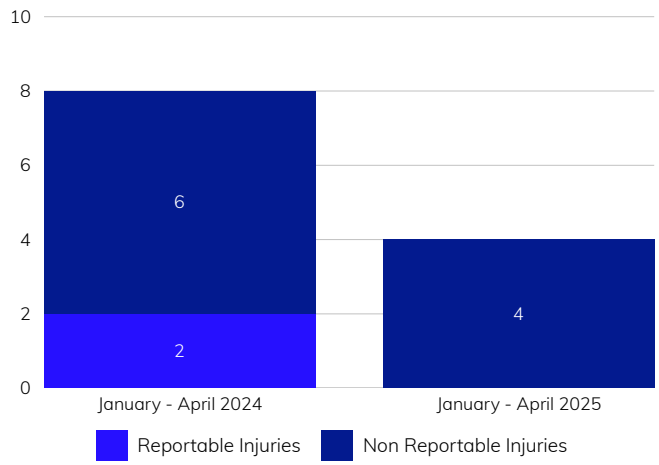
- **Pilot Program (March 2024):** Initiated at two Texas plants with 30 volunteer employees each, emphasizing face-to-face introductions and feedback gathering.
- **Gradual Expansion (From June 2024)**: Based on positive pilot results, deployment expanded to more sites, initially relying on volunteers to create a positive snowball effect and build peer acceptance.
- **Continuous Communication & Education**: Ongoing efforts through company calls, training sessions, and open dialogue addressed concerns about surveillance and consistently reinforced the technology's focus on worker well-being.
- **Full Rollout (From January 2025)**: Transitioned to a company-wide program aiming for every employee to wear the sensor at least once to establish a baseline, acknowledging that ongoing education remains important.

The Solution in Action: Integrating Data and Feedback

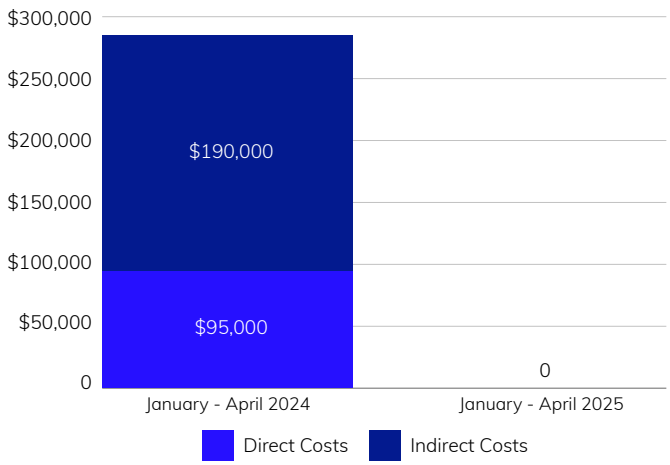
The SoterCoach technology quickly became integral to Covia's EHS framework, providing valuable data that helped personnel clearly identify problems at their sites in a way that wasn't possible before. The real-time feedback empowered workers by allowing them to understand their movements and make immediate adjustments, fostering personal ownership of their ergonomic safety. Supervisors gained access to objective data, enabling them to identify high-risk tasks, recognize patterns, and support individuals needing intervention. Additionally, the Soter video analysis tool streamlined the quarterly ergonomic improvement process, proving to be a quick, simple, and appreciated feature. This data-driven approach facilitated targeted improvements and effectively complemented existing safety models like SBI (Situation-Behavior-Impact) by offering direct feedback on movement behavior and associated risks.

Results: Measurable Improvements and Financial Impact

Ergonomic Injuries
Before/After the Soter Program



Ergonomic Injury Costs
Before/After the Soter Program



info@soteranalytics.com www.soter.com +1 (808) 646-7289

The implementation yielded significant, quantifiable results that resonated strongly with EHS and management, providing undeniable proof of the technology's impact both physically and financially. This objective data built a powerful case for adoption and helped justify future ergonomic investments. Key results included:

- **Reduced Ergonomic Injuries**: Comparing Jan-Apr 2024 to Jan-Apr 2025, reportable ergonomic injuries were eliminated (dropping from 2 to 0), and non-reportable injuries decreased from 6 to 4.
- **Significant Cost Savings**: Associated injury costs were eliminated. Direct costs of $95,000 and indirect costs of $190,000 recorded in Jan-Apr 2024 dropped to $0 in Jan-Apr 2025.
- **Dramatic Behavioral Risk Reduction**: "*Every time I look at the dashboard, I'm always amazed at the improvement rates. It's remarkable*," Mona said. Covia observed around a 77% reduction in hazardous back movements and 42% for shoulders.
- **Consistent Ergonomic Improvement**: The data highlighted positive behavioral change and learning. "*It's amazing how quickly people start to improve in the early days of their program... there are a lot of employees that have 17-18-19 days of consistent improvement*," Mona observed.
- **Enhanced Engagement & Justification**: Supervisors became more autonomous in using the dashboard. The video analysis tool provided clear "*before and after*" visuals, strengthening justifications for capital requests.

Future Plans

Covia aims to solidify Soter technology as a standard component of their yearly safety rhythm. The immediate goal is establishing a steady yearly calendar so the system becomes a normal, expected activity – the crucial first step. Future plans involve leveraging baseline data for targeted sampling (focusing on higher-risk employees or those returning post-injury), integrating the technology into new hire onboarding, and driving continuous improvement through ongoing education. The long-term vision reflects the potential impact: eventually having everyone wear a device all the time, making it almost like standard PPE.

In conclusion, Covia's partnership with Soter demonstrably transformed their ergonomic safety approach, leading to significant, measurable reductions in musculoskeletal risks and associated costs. By embracing wearable technology focused on live feedback and objective data, supported by a thoughtful, people-centric implementation, Covia not only improved worker behavior but also eliminated reportable ergonomic injuries and their substantial financial burden in the observed period. The Soter platform empowers workers and supervisors, provides quantifiable results for interventions, and integrates seamlessly into their safety culture, paving the way for a safer, healthier, and more cost-effective future for their workforce.

About Soter

Soter, the global leader in AI solutions since 2017, revolutionizes risk management, workplace safety, and compliance for industrial and insurance sectors.